aquacross



Fuel Quality Directive

Policy Review

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Acknowledgments & Disclaimer

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Fuel Quality Directive

Policy Review
Name/Type of the Legal Act or Policy
Fuel Quality Directive. Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC. Subsequent Legal Acts: Council Directive (EU) 2015/652 of 20 April 2015 laying down calculation methods and reporting requirements pursuant to Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels: to be transposed at the 21st April 2017 at the latest. This document addresses the 5 elements referred to in Art. 7a(5) of the Directive 2009/30/EC on measures concerning the mechanism to monitor and reduce greenhouse gas (GHG) emissions (method for calculating GHG emissions of fuels and other energy from non-biological sources; method for calculating the baseline fossil fuel GHG intensity to be used as a reference for measuring compliance with the target -Annex; Calculation and verification of the GHG intensity of electric energy used in electric vehicles; Any rules necessary to give effect to the requirement that two or more suppliers from one or more Member States are allowed to report their GHG intensity jointly; Other measures necessary for implementing Art.7a.)
Entry into force
25/06/2009
Departments/Units in charge
Directorate General for Climate Action, DG CLIMA (presumably C.2) Dir C — Mainstreaming Adaptation and Low Carbon Technology C.2. Transport and Ozone Owen, Philip (Head of Unit) Avenue de Beaulieu 24/Beaulieulaan 24 1160 Bruxelles/Brussel (Belgique) Tel: +32 229-91111 Internet: http://ec.europa.eu/clima/news
Common Implementation strategy (CIS processes)
No evidence on the existence of a specific CIS. However, in order to deepen into certain aspects to be implemented within the framework of the Directive, public consultation processes have been carried out: a) Consultation on the implementation of some Art. 7a

(GHG emission reductions) issues; and b) (Restricted stakeholder) Pre-consultation on ILUC (indirect land use change from biofuels and bioliquids).

Administrative body handling implementation in MS

Responsible organizations for:

a) Fuel Quality Monitoring System (FQMS) Administration (the organisation responsible for monitoring and reporting on fuel quality in the Member State). Spain: Ministry of Industry, Energy and Tourism (with the participation of the Autonomous Regions as responsible for sampling and analysing the fuels); UK: Department for Transport (DfT); Portugal: Ministry of Environment, Spatial Planning and Energy, the Directorate General for Energy and Geology; Italy: Ministry of Environment, Territory and Sea.

b) Collection of sales data (or who gathers data; by the responsible organisation, from fuel companies or other sources). Spain: Ministry of Industry, Energy and Tourism; UK: Department of Energy and Climate Change (DECC) Energy Statistics data; Portugal: companies report their sales to the Directorate General for Energy and Geology (DGEG); Italy (Ministry of Industry).

Main Objective

The Directive "sets, in respect of road vehicles, and non-road mobile machinery (including inland waterway vessels when not at sea), agricultural and forestry tractors, and recreational craft when not at sea (a) technical specifications on health and environmental grounds for fuels to be used with positive ignition and compression-ignition engines, taking account of the technical requirements of those engines; and (b) a target for the reduction of life cycle GHG emissions" (Art. 1)

Principles included in the legal text

Subsidiarity; Proportionality; Sustainability

Other objectives/Key concepts/key elements of the legislation

(According to EUR-Lex and DG Environment website) A framework for cleaner fuels for road transport. The Directive establishes a framework for monitoring and reducing fuel life cycle GHG emissions, contributing to achieve GHG reduction goals.

- *Fuel suppliers* are required to *report and reduce the life cycle GHG emissions of energy supplied for road transport*. The goal is a reduction of *life cycle GHG emissions* by 6 % (or up to 10 % if the EU country chooses) per unit of energy from fuel supplied by December 2020.
- *Biofuels* should be produced sustainably. For counting towards the GHG reductions in this directive the *sustainability criteria* (i.e. biofuels to not be produced on land with high biodiversity value, or to be made from materials with high carbon stock) has to be fulfilled.
- *Harmonisation of the rules for fuel* (amending number of elements of the petrol and diesel specifications by setting technical specifications based on health and environmental issues, such as reducing the sulphur content of diesel and petrol to 10 mg/kg max):

environmental specifications for market fuels to be used for vehicles are detailed in Annexes.

- Promotion of *blending of bio components* in fuel (e.g. up to 10 % ethanol in petrol). Member States have to ensure that petrol and diesel placed on the market comply with the requirements set out in the Directive (Annex I and II) respectively.
- Appropriate *information* should be provided to consumers on the biofuel content of petrol and diesel.

Introduces (Art. 7a) a *requirement on fuel suppliers to reduce the GHG intensity* of energy supplied for road transport (Low Carbon Fuel Standard).

Terminology

- *Life cycle GHG emissions*: "net emissions of CO2, CH4 and N2O that can be assigned to the fuel (including any blended components) or energy supplied. Includes all relevant stages from extraction or cultivation, including land-use changes, transport and distribution, processing and combustion, irrespective of where those emissions occur" (art. 1);
- *Gas oils* "intended for use by non-road mobile machinery (including inland waterway vessels), agricultural and forestry tractors, and recreational craft" (art. 1);
- *Member States with low ambient summer temperatures*: "where the average temperature for a majority of their territory is below 12 °C for at least two of the three months of June, July and August" (Recital 6).
- *GHG* (- emissions per unit of energy): "the total mass of CO2 equivalent GHG emissions associated with the fuel or energy supplied, divided by the total energy content of the fuel or energy supplied (for fuel, expressed as its low heating value)" (art. 1);
- *Supplier*: "the entity responsible for passing fuel or energy through an excise duty point or, if no excise is due, any other relevant entity designated by a Member State" (art. 1);
- *Biofuels*: same meaning as in Directive 2009/28/EC, i.e., "gaseous fuel for transport produced from biomass".
- Marine fuels: "any petroleum-derived liquid fuel intended for use or in use on board a vessel, including those fuels defined in ISO 8217, includes any petroleum-derived liquid fuel in use on board inland waterway vessels or recreational craft, as defined in Directive 97/68/EC and Directive 94/25/EC" (art. 2);
- *Sustainability criteria for biofuels* (art. 7b): "GHG emission saving from the use of biofuels taken into account for the purposes referred to in paragraph 1 shall be at least 35 % (art. 7b.2); shall not be made from raw material obtained from land with high biodiversity value (art. 7b.3); shall not be made from raw material obtained from land with high carbon stock (art. 7b.4); shall not be made from raw material obtained from land that was peatland in January 2008 (art. 7b.5); agricultural raw materials cultivated in the Community and used for the production of biofuels shall be obtained in accordance with the requirements and standards under the provisions referred to under the heading "Environment" in Part A and in point 9 of Annex II to Council Regulation (EC) No 73/2009 and in accordance with the minimum requirements for

good agricultural and environmental condition defined pursuant to Art. 6(1) of that Regulation".

- *Land with high biodiversity value* (art. 7b): "a) primary forest and other wooded land, that is forest and other wooded land of native species, where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed; (b) areas designated:(i) by law or by the relevant competent authority for nature protection purposes; or (ii) for the protection of rare, threatened or endangered ecosystems or species recognised by international agreements or included in lists drawn up by intergovernmental organisations or the International IUCN, subject to their recognition in accordance with the second subparagraph of Art. 7c(4); (c) highly biodiverse grassland".
- *Highly biodiverse grasslands* (art. 7b): "(i) natural grassland that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes; or (ii) non-natural, namely, grassland that would cease to be grassland in the absence of human intervention and which is species-rich and not degraded, unless evidence is provided that the harvesting of the raw material is necessary to preserve its grassland status."
- *Land with high carbon stock* (art. 7b): "(a) wetlands (land that is covered with or saturated by water permanently or for a significant part of the year); (b) Continuously forested areas (land spanning more than one hectare with trees higher than five metres and a canopy cover of more than 30%, or trees able to reach those thresholds in situ); (c) land spanning more than one hectare with trees higher than five metres and a canopy cover of between 10% and 30%, or trees able to reach those thresholds in situ, unless evidence is provided that the carbon stock of the area before and after conversion is such that, when the methodology laid down in Part C of Annex IV is applied"

Derogations

- Art. 3 para. 4 subpara. 1 establishes a derogation from the maximum summer petrol vapour pressure applicable to those Member States with low ambient summer temperatures (i.e. where the average temperature for a majority of their territory is below 12 °C for at least two of the three months of June, July and August): Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Sweden and the United Kingdom (Art. 2 No. 5).
- For other Member States than those with low ambient summer temperatures, Art. 3 para. 4 subpara. 2 provides for the possibility of a derogation (conditional on compliance with Community legislation on air quality and air pollution) from the maximum summer vapour pressure for ethanol into petrol mixtures after an appropriate assessment by the Commission

Both derogations are subject to the further requirements specified in Art. 3 para. 5.

Types of management measures

"Suppliers should, by 31 December 2020, gradually reduce life cycle GHG emissions by up to 10% per unit of energy from fuel and energy supplied. This reduction should amount to at least 6% by 31 December 2020, compared to the EU-average level of life cycle GHG emissions per unit of energy from fossil fuels in 2010, obtained through the use of biofuels, alternative fuels and reductions in flaring and venting at production sites. Subject to a review, it should comprise a further 2% reduction obtained through the use of environmentally friendly carbon capture and storage technologies and electric vehicles and an additional further 2% reduction obtained through the purchase of credits under the Clean Development Mechanism of the Kyoto Protocol." (Recital 9) For GHG emission reduction (art. 7a): Measures necessary for the implementation of this Article include (a) the methodology for the calculation of life cycle GHG emissions from fuels other than biofuels and from energy; (b) the methodology specifying (before 1 January 2011), the fuel baseline standard based on the life cycle GHG emissions per unit of energy from fossil fuels in 2010 for the purposes of paragraph 2; (c) any necessary rules to give effect to ensure that a group of suppliers may choose to meet the reduction obligations pursuant to paragraph 2 jointly; d) the methodology to calculate the contribution of electric road vehicles. Calculation of life cycle GHG emissions from biofuels: Member States should follow the calculation methodology detailed in art. 7.d, and submit (by March 2010) a report with a list of those areas (NUTS2 level) where the typical GHG emissions from cultivation of agricultural raw materials can be expected to be lower than or equal to the emissions reported under the heading "Disaggregated default values for cultivation" in Part D of Annex IV to this Directive, with a description of the method and data used to establish that list. Regarding the Proposal for a Council Directive on laying down calculation methods and reporting requirements pursuant to Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels, was preceded by consultations with the interested parties and impact assessments.
Spatial coverage
The whole territory of Member States. For biofuels the spatial coverage also includes third countries that are a significant source of biofuels or of raw material for biofuels consumed within the territory of the Community. In these countries the sustainability criteria determined in this Directive for the production of the fuel need also to be fulfilled. Within the framework of the recently approved Council Directive (EU) 2015/652, suppliers shall report annually to the Member State, on the GHG intensity of fuel and energy supplied within each Member State by providing information: on the total volume of each type of fuel or energy supplied, indicating where purchased and its origin (and life cycle GHG emissions per unit of energy).
Reporting units – what are the specific transposition requirements
On which spatial unit is reporting carried out? E.g. river basin/ Member State – are you aware of any commission studies that discuss the issue of different governance settings for reporting. Include links to studies. Reporting is implemented on a Member State scale (Fuel

Quality Monitoring). European Commission reports to European Parliament and Council on different issues with different periodicity (check 6.2).
Management unit
Territory of Member States
Key planning steps
On GHG emission reductions (Art. 7.a), Member States should: ▸ Designate the supplier or suppliers responsible for monitoring and reporting life cycle GHG emissions per unit of energy from fuel and energy supplied. ▸ Designate authority responsible for receiving annual reporting from suppliers on the greenhouse intensity of fuel and energy supplied within each Member State and ensure that reports are subject to verification. ▸ Require suppliers to reduce gradually life cycle GHG emissions per unit of energy from fuel and energy supplied by up to 10% by 31 December 2020, compared with the fuel baseline standard (referred to in paragraph 5b): (a) 6% by 31 December 2020. Member States may require suppliers, to comply with the following intermediate targets: 2% by 31 December 2014 and 4% by 31 December 2017; (b) an indicative additional target of 2% by 31 December 2020, subject to Art. 9(1)(h), to be achieved through one or both of the following methods: (i) the supply of energy for transport supplied for use in any type of road vehicle, non-road mobile machinery (including inland waterway vessels), agricultural or forestry tractor or recreational craft; (ii) the use of any technology (including carbon capture and storage) capable of reducing life cycle GHG emissions per unit of energy from fuel or energy supplied; c) an indicative additional target of 2% by 31 December 2020, subject to Art. 9(1)(i), to be achieved through the use of credits purchased through the CDM of the Kyoto Protocol, under the conditions set out in Directive 2003/87/EC (establishing a scheme for GHG emission allowance trading within the Community (17), for reductions in the fuel supply sector). ▸ Ensure that a group of suppliers may choose to meet the reduction obligations jointly. In such case they shall be considered as a single supplier. ▸ Implement measures necessary for the implementation of this article: (a) the methodology for the calculation of life cycle GHG emissions from fuels other than biofuels and from energy; (b) the methodology specifying (before 1 January 2011), the fuel baseline standard based on the life cycle GHG emissions per unit of energy from fossil fuels in 2010 for the purposes of paragraph 2; (c) any necessary rules to give effect to ensure that a group of suppliers may choose to meet the reduction obligations pursuant to paragraph 2 jointly; d) the methodology to calculate the contribution of electric road vehicles On biofuels for GHG emission reductions (art. 7c): Member States shall require economic operators to show that the sustainability criteria (Art. 7b(2) to (5)) have been fulfilled, by using a mass balance system (fulfilling specific requirements) and shall take measures to

ensure that economic operators submit reliable information and make available (requiring independent auditing of the information submitted) and shall submit this information to the Commission (in aggregated form).On calculation of life cycle GHG emissions from biofuels: Member States should follow the calculation methodology detailed in art. 7.d, and submit (by March 2010) a report with a list of those areas (NUTS2 level) where the typical GHG emissions from cultivation of agricultural raw materials can be expected to be lower than or equal to the emissions reported under the heading "Disaggregated default values for cultivation" in Part D of Annex IV to this Directive, with a description of the method and data used to establish that list.

Timelines

What are the agreed timelines for implementation?

- Date of effect: 25.06.2009;
- Date of transposition: 31.12.2010 (deadline)
- Reporting: By 30 June each year the Member States must submit a summary of fuel quality monitoring data collected during the period January to December of the previous calendar year, in accordance with Art. 8(1) of Directive 98/70/EC as amended by Directive 2009/30/EC.
- GHG emission reductions (see previous section): suppliers (by Members States requirement) to reduce life cycle GHG emissions per unit of energy from fuel and energy supplied by up to 10% per unit of energy compared to 2010 levels: 31 December 2020 (deadline) [1]
- GHG emission saving from biofuels use (fulfilling art. 7b. paragraph 1) shall be: at least 50 % by 1 January 2017, at least 60 % for biofuels produced in installations in which production has started on or after 1 January 2017, from 1 January 2018.
- Life Cycle GHG Emissions: 10 ppm sulphur limit on NRMM fuels effective from 2011.
- Report from the Commission to the European Parliament and the Council, in respect of both third countries and Member States that are a significant source of biofuels or of raw material for biofuels consumed within the Community, on national measures taken to respect the sustainability (Art. 7b, paragraphs 2-5) and for soil, water and air protection: every two years, fist report in 2012.
- Report from the Commission to the European Parliament and the Council on the operation of the mass balance verification method (for verifying compliance with sustainability criteria for biofuels as described in art. 7ca) and on the potential for allowing for other verification methods in relation to some or all types of raw material or biofuels: in 2010 and 2012 (art. 7c.2).

[1] At least 6% of this target is expected to be achieved via the increased use of biofuels, the increased use of alternative fuels, and/or reductions in flaring and venting emissions and fuel production and refining facilities (i.e. reduction in lifecycle emissions of conventional fossil petrol and diesel fuels). Subject to review, a further 2% reduction should be obtained through the use of environmentally friendly carbon capture storage technologies and electric vehicles. An additional further 2% reduction should be obtained through the purchase of credits under the Clean Development Mechanism of the Kyoto Protocol.

- Report from the Commission to the European Parliament and the Council on the verification of compliance with the sustainability criteria for biofuels on: a) the effectiveness of the system in place for the provision of information on sustainability criteria; and (b) whether it is feasible and appropriate to introduce mandatory requirements in relation to air, soil or water protection, taking into account the latest scientific evidence and the Community's international obligations: by 31 December 2012 (art. 7c.8).
- Report from the Commission to the European Parliament and the Council on the feasibility of lists of areas in third countries where the typical GHG emissions from cultivation of agricultural raw materials (biofuels) can be expected to be lower than or equal to the emissions reported under Annex IV: by 31 March 2010 (art. 7d.4).
- Report from the Commission to the European Parliament and the Council on the estimated typical and default values (calculation of life cycle GHG emission from biofuels that were not on the market/in negligible quantities in January 2008): by 31 December 2012 deadlines and every two years thereafter (art. 7d.5).
- Report from the Commission to the European Parliament and the Council on the impact of indirect land use change on GHG emissions and addressing ways to minimise that impact: by 31 December 2010 (art. 7d.6).
- Report MMT (methylcyclopentadienyl manganese tricarbonyl) in fuels (Art. 8a); from the Commission to the European Parliament and the Council, in respect the impact on social sustainability in the Community and in third countries of increased demand for biofuel, on the impact of Community biofuel policy on the availability of foodstuffs at affordable prices, in particular for people living in developing countries, and on wider development issues: every two years, fist report in 2012.
- Suppliers report to the authority designated by the Member State, on the GHG intensity of fuel and energy supplied: yearly from January 2011 onwards.
- Assessment from the Commission of the risks for health and the environment from the use of metallic additives in fuel and, test methodology development. Conclusions reported to the European Parliament and to the Council: by 31 December 2012.

Integration/coordination issues with other related pieces of legislation

Legal instruments cited in the Directive:

- Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.
- Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.
- Directive 97/68/EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery.
- Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission.

- Decision 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme.
- Interinstitutional agreement on better law-making.
- Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC (amended by the analysed Directive).
- Council Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, amending Regulations (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003.
- CDM of the Kyoto Protocol, under the conditions set out in Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for GHG emission allowance trading within the Community (17), for reductions in the fuel supply sector.
- Conventions of the International Labour Organisation (ILO): 29, 87, 98,100, 105, 111, 138 and 182.
- Cartagena Protocol on Biosafety.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- Ramsar Convention: Convention on Wetlands of International Importance.

Legal instruments citing the Directive

- Council Decision (EU) 2015/1789 of 1 October 2015 on the position to be adopted, on behalf of the European Union, within the EEA Joint Committee concerning amendments to Annex II (Technical regulations, standards, testing and certification) and Annex XX (Environment) to the EEA Agreement (Fuel Quality Directive)
- Proposal for a Council Decision on the position to be adopted, on behalf of the European Union, in the EEA Joint Committee concerning an amendment Annex II (Technical regulations, standards, testing and certification) and Annex XX (Environment) to the EEA Agreement (Fuel Quality Directive).
- Commission Regulation (EU) No 1307/2014 of 8 December 2014 on defining the criteria and geographic ranges of highly biodiverse grassland for the purposes of Art. 7b(3)(c) of Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels and Art. 17(3)(c) of Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources.
- 2011/437/EU: Commission Implementing Decision of 19 July 2011 on the recognition of the 'Biomass Biofuels Sustainability voluntary scheme' for demonstrating compliance with the sustainability criteria under Directives 2009/28/EC and 2009/30/EC of the European Parliament and of the Council.
- 2012/210/EU: Commission Implementing Decision of 23 April 2012 on recognition of the 'Ensus voluntary scheme under RED for Ensus bioethanol production' for

demonstrating compliance with the sustainability criteria under Directives 2009/28/EC and 98/70/EC of the European Parliament and of the Council.

- 2011/439/EU: Commission Implementing Decision of 19 July 2011 on the recognition of the 'Bonsucro EU' scheme for demonstrating compliance with the sustainability criteria under Directives 2009/28/EC and 2009/30/EC of the European Parliament and of the Council.
- 2011/440/EU: Commission Implementing Decision of 19 July 2011 on the recognition of the 'Round Table on Responsible Soy EU RED' scheme for demonstrating compliance with the sustainability criteria under Directives 2009/28/EC and 2009/30/EC of the European Parliament and of the Council.
- 2011/436/EU: Commission Implementing Decision of 19 July 2011 on the recognition of the 'Abengoa RED Bioenergy Sustainability Assurance' scheme for demonstrating compliance with the sustainability criteria under Directives 2009/28/EC and 2009/30/EC of the European Parliament and of the Council.
- 2011/438/EU: Commission Implementing Decision of 19 July 2011 on the recognition of the 'International Sustainability and Carbon Certification' scheme for demonstrating compliance with the sustainability criteria under Directives 2009/28/EC and 2009/30/EC of the European Parliament and of the Council.
- Communication from the Commission on voluntary schemes and default values in the EU biofuels and bioliquids sustainability scheme.
- Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels.
- Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure Text with EEA relevance.

Coordination issues with the EU Biodiversity Strategy

It could have direct effect on target 1 (Fully implement the Birds and Habitats Directives) due to the restrictions introduced by Art. 7b in terms of sustainability criteria for biofuels (provided that the land with high biodiversity protected area designated by law is subject to the Habitats Directive).

Relevance to ecosystems/habitats?

Art. 7b sets up sustainability criteria for biofuels and imposes restrictions on two types of lands source of raw material: *with high biodiversity* value and with high carbon stock. "3. Biofuels shall not be made from raw material obtained from land with high biodiversity value, namely, land that had one of the following statuses in or after January 2008, whether or not the land continues to have such a status: (a) primary forest and other wooded land, that is forest and other wooded land of native species, where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed; (b) areas designated: (i) by law or by the relevant competent authority for nature protection purposes; or (ii) for the protection of rare, threatened or endangered ecosystems or species recognised

by international agreements or included in lists drawn up by intergovernmental organisations or the IUCN, […] unless evidence is provided that the production of that raw material did not interfere with those nature protection purposes. (c) highly biodiverse grassland that is: (i) natural, namely, grassland that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes; or (ii) non-natural, namely, grassland that would cease to be grassland in the absence of human intervention and which is species-rich and not degraded, unless evidence is provided that the harvesting of the raw material is necessary to preserve its grassland status. "4. Biofuels taken into account for the purposes referred to in paragraph 1 shall not be made from raw material obtained from land with high carbon stock, namely, land that had one of the following statuses in January 2008 and no longer has that status: (a) Wetlands, namely, land that is covered with or saturated by water permanently or for a significant part of the year; (b) Continuously forested areas, namely, land spanning more than one hectare with trees higher than five metres and a canopy cover of more than 30%, or trees able to reach those thresholds in situ; (c) land spanning more than one hectare with trees higher than five metres and a canopy cover of between 10% and 30%, or trees able to reach those thresholds in situ, unless evidence is provided that the carbon stock of the area before and after conversion is such that, when the methodology laid down in Part C of Annex IV is applied, the conditions laid down in paragraph 2 of this Article would be fulfilled."
Drivers
Word 'drivers' is not specifically mentioned in the Directive. Drivers which the legal act/policy address: Transport (road vehicles, and non-road mobile machinery -including inland waterway vessels when not at sea-, agricultural and forestry tractors, and recreational craft when not at sea); Agriculture (for producing biofuels)
Pressures
"Pressures" are not specifically mentioned in the Directive. Pressures which the legal act/policy address: Gas emissions (greenhouse -CO_2, CH^4 and N_2O- and other nature) from the combustion of transport fuels (petrol, diesel and gas-oil); Emission of pollutants (e.g. metallic additives in fuels); (Direct/indirect) Land use change (due to biofuels production) leading to (impacts): loss of natural vegetation, fragmentation of ecosystems, GHG emissions, abstraction of water for crop irrigation, increased nutrient load due to the use of fertilizers.
Assessment of Environmental State
Not specifically referred to the state of an ecosystem. Annex I and II set up environmental specifications for market fuels to used for vehicles equipped with a) positive-ignition engines: minimum/maximum values; b) with compression ignition engines (e.g. Density, distillation properties, sulphur contents, FAME content, polycyclic aromatic hydrocarbons…). Annex III: sets up vapour pressure waiver permitted for petrol containing bioethanol (according to bioethanol content (%v/v)
Data

Country Annual Fuel Quality Reports (and XLS files) are available at EIONET Database whereas annual European ones are at DG Climate Action Website (and CIRCAB). By 30 June each year the Member States must submit a summary of fuel quality monitoring data collected during the period January to December of the previous calendar year (in accordance with Art. 8(1) of Directive 98/70/EC as amended by Directive 2009/30/EC). National reports include information on fuel availability, description of the monitoring systems in place, descriptions of the fuel quality monitoring system, compliance with sampling, reporting requirements and with Directive 98/70/EC limits; temporal trends, sales of fuels and statistical analysis.

Directive 2009/30/EC brings more demanding reporting obligations (programmed to be taken into account in the 2011 Fuel Quality Monitoring Report) but currently pending to be fully incorporated: suppliers shall report annually, to the authority designated by the Member State, on the GHG intensity of fuel and energy supplied within each Member State by providing, as a minimum, the following information: (a) the total volume of each type of fuel or energy supplied, indicating where purchased and its origin; and (b) Life cycle GHG emissions per unit of energy (Art. 7a). Members States will transpose council Directive (EU) 2015/652 providing methodological guidelines on these issues the 21st April 2017 at the latest.

Funding

Agricultural raw materials cultivated in the Community and used for the production of biofuels: direct support schemes for farmers under CAP (if fulfilling Council Regulation (EC) No 73/2009 of 19 January 2009, Annex II, Point A. Environment)

About AQUACROSS

Knowledge, Assessment, and Management for AQUAtic Biodiversity and Ecosystem Services aCROSS EU policies (AQUACROSS) aims to support EU efforts to protect aquatic biodiversity and ensure the provision of aquatic ecosystem services. Funded by Europe's Horizon 2020 research programme, AQUACROSS seeks to advance knowledge and application of ecosystem-based management (EBM) for aquatic ecosystems to support the timely achievement of the EU 2020 Biodiversity Strategy targets.

Aquatic ecosystems are rich in biodiversity and home to a diverse array of species and habitats, providing numerous economic and societal benefits to Europe. Many of these valuable ecosystems are at risk of being irreversibly damaged by human activities and pressures, including pollution, contamination, invasive species, overfishing and climate change. These pressures threaten the sustainability of these ecosystems, their provision of ecosystem services and ultimately human well-being.

AQUACROSS responds to pressing societal and economic needs, tackling policy challenges from an integrated perspective and adding value to the use of available knowledge. Through advancing science and knowledge; connecting science, policy and business; and supporting the achievement of EU and international biodiversity targets, AQUACROSS aims to improve ecosystem-based management of aquatic ecosystems across Europe.

The project consortium is made up of sixteen partners from across Europe and led by Ecologic Institute in Berlin, Germany.

AQUACROSS PARTNERS

Ecologic Institute (ECOLOGIC) | Germany

Leibniz Institute of Freshwater Ecology and Inland Fisheries (FVB-IGB) | Germany

Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO) | France

Wageningen Marine Research (WMR) | Netherlands

University of Natural Resources & Life Sciences, Institute of Hydrobiology and Aquatic Ecosystem Management Austria

Fundación IMDEA Agua (IMDEA) | Spain

Universidade de Aveiro (UAVR) | Portugal

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University of Liverpool (ULIV) | United Kingdom

University College Cork, National University of Ireland (UCC) | Ireland

Royal Belgian Institute of Natural Sciences (RBINS) | Belgium

Stockholm University, Stockholm Resilience Centre (SU-SRC) | Sweden

Danube Delta National Institute for Research & Development (INCDDD) | Romania

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Twitter	@AquaBiodiv
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